Author Index to Volume 12

Acosta-Urquidi, J.: Soma Spike of Neuroendocrine Bag Cells of Aplysia californica, 367

Agranoff, B. W.: see Feldman, E. L.

Aguilar, J. S.: see Criado, M. Ajimal, G. S.: see Ram, J. L.

Axelrod, D.: see Feldman, E. L.

Bacon, J.: see Zack, S.

Baughman, S.: see Colip, M. P.

Baumgold, J.: see Fink, D. J.

Baux, G.: Action of Colchicine on Membrane Currents and Synaptic Transmission in Aplysia Ganglion Cells, 75

Becker, J.: see Papka, R.

Binkley, S.: see Brammer, M.

Bishop, C. A.: Vertical Motion Detectors and their Synaptic Relations in the Third Optic Lobe of the Fly, 281

Bishop, L. G.: see Bishop, C. A.

Bos, N. P. A.: see Kits, K. S.

Brammer, M.: Pineal Glands of Immature Rats: Rise and Fall in N-Acetyltransferase Activity in vitro, 167

Brownstein, M. J.: see Fink, D. J.

Bulloch, A. G. M.: Physiological Basis of Feeding Behavior in *Tritonia diomedea*. III. Role of Depolarizing Afterpotentials, 515

Buño, W., Jr.: Dynamic Properties of Cockroach "Bristlelike" Hair Sensilla, 101

—: Dynamic Properties of Cockroach Cercal "Threadlike" Hair Sensilla, 123

——: Dynamic analysis of cockroach giant interneuron activity evoked by forced displacement of cercal thread-hair sensilla, 561

Bureš, J.: Cerebral [K+]_e Increase as an Index of the Differential Susceptibility of Brain Structures to Terminal Anoxia and Electroconvulsive Shock, 211

Burešová, O.: see Bureš, J.

Cameron, D. A.: see Riopelle, R. J.

Carpenter, D. O.: see Scappaticci, K. A.

Chambille, I.: see Rospars, J. P.

Chesler, M.: Mechanical Properties of a Slow Muscle in the Cockroach, 391

Colip, M. P.: Alteration of Fucose/Leucine Incorporation into PNS Myelin by Isoniazid Neuropathy, 193

Cooper, K. E.: see Thornhill, J. A.

Craelius, W.: Release of ³H-Gamma-Amino-

butyric Acid (GABA) by Inhibitory Neurons of the Crayfish, 249

Criado, M.: Action of Detergents and Pre- and Postsynaptic Localization of ³H-Naloxone Binding in Synaptosomal Membranes. A Structural Approach, 259

Crispino, L.: see Buño, W., Jr.

Delcomyn, F.: Nickel Chloride for Intracellular Staining of Neurons in Insects, 623

De Robertis, E.: see Criado, M.

Donaldson, P. L.: Increased Effectiveness of a Motorneuron after Partial Denervation of its Target Muscle in the Cricket Teleogryllus oceanicus, 545

Dretchen, K. L.: see Scappaticci, K. A. Dudek, F. E.: see Acosta-Urquidi, J.

Edwards, B. A. V.: see Scott, B. S.

Enyeart, J.: Cyclic AMP, 5-HT, and the Modulation of Transmitter Release at the Crayfish Neuromuscular Junction, 505

Feldman, E. L.: Studies on the Localization of Newly Added Membrane in Growing Neurites, 591

Fernald, R. D.: Review of Neuroethology: An Introduction to the Neurophysiological Fundamentals of Behavior, by Jorg-Peter Ewert, 303

Fink, D. J.: Multiple-Rate Components of Axonally Transported Proteins in the Hypothalamo-Neurohypophysial System of the Rat, 487

Fourtner, C. R.: see Chesler, M.

Fricke, R. A.: see Craelius, W.

Gähwiler, B. H.: Labeling of Neurons within CNS Explants by Intracellular Injection of Lucifer Yellow, 187

Gainer, H.: see Fink, D. J.

Glantz, R. M.: Interneurons of the Crayfish Brain: The Relationship between Dendrite Location and Afferent Input, 311

Goldschmeding, J. T.: Axonal Branching Pattern and Coupling Mechanisms of the Cerebral Giant Neurons in the Snail, Lymnaea stagnalis, 405

Handler, P.: see Buño, W., Jr.

Heacock, A. M.: see Feldman, E. L.

Host, J. J.: see Jennings, K. R.

Hug, W.: see Kutsch, W.

Hyden, H.: The Effect of Antiserum to S 100 Protein on Behavior and Amount of S 100 in Brain Cells, 201

Inomata, K.: see Takenaka, T.

Jennings, K. R.: Serotonergic Inhibition of Afterdischarge in Peptidergic Bag Cells, 579
Josephson, R. K.: see Donaldson, P. L.

Kaczmarek, L. K.: see Jennings, K. R.

Kirk, M.: see Glantz, R. M.

Kits, K. S.: Pacemaking Mechanism of the Afterdischarge of the Ovulation Hormone-Producing Caudo-Dorsal Cells in the Gastropod Mollusc Lymnaea stagnalis, 425

Kravitz, E. A.: see Livingstone, M. S.

Krivanek, J.: In vivo Electrical Stimulation Alters Sensitivity of the Brain (Na⁺ + K⁺) ATPase Toward Inhibition by Vanadate, 343

Kutsch, W.: Dipteran Flight Motor Pattern: Invariabilities and Changes during Postlarval Development, 1

Lange, P. W.: see Hyden, H.

Livingstone, M. S.: Biochemistry and Ultrastructure of Serotonergic Nerve Endings in the Lobster: Serotonin and Octopamine are Contained in Different Nerve Endings, 27 Lobera, B.: see Cano, J.

Lodder, J. C.: see Goldschmeding, J. T.

Loughton, B. G.: see Orchard, I.

Lukowiak, K.: see Thornhill, J. A.

Margiotta, J. F.: see Meyer, D. J.

 Mateos, A.: see Buño, W., Jr.
Matus, A.: γ-Aminobutyric Acid Receptors in Brain Postsynaptic Densities, 67

Meyer, D. J.: The Shadow Response of the Cockroach Periplaneta americana, 93

Miller, M. W.: Some Effects of Proctolin on the Cardiac Ganglion of the Maine Lobster, Homarus americanus (Milne Edwards), 629

Minnen, J. Van.: Neurosecretory Cells in the Central Nervous System of the Giant Garden Slug, *Limax maximus*, 297

Munoz-Martinez, E. J.: Axonal Transport: A Quantitative Study of Retained and Transported Protein Fraction in the Cat, 15

Monti-Bloch, L.: see Buño, W., Jr.

--: see Buño, W., Jr.

Nagle, G. T.: The Molluscan Cardioactive

Neuropeptide FMRFamide: Subcellular Localization in Bivalve Ganglia, 599

Nunez, R.: see Munoz-Martinez, E. J.

Ochs, S.: see Stromska, D. P.

Orchard, I.: Is Octopamine a Transmitter Mediating Hormone Release in Insects?, 143

Page, C. H.: see Thompson, C. S.

Papka, R.: Age-Dependent Anatomical Changes in an Identified Neuron in the CNS of Aplysia californica, 455

Pehling, G.: see Matus, A.

Pellmar, T. C.: see Scappaticci, K. A.

Peretz, B.: see Papka, R.

Peretz, B.: see Rattan, K. S. Peterson, R. G.: see Colip, M. P.

Phillips, C. E.: Organization of Motor Neurons to a Multiply Innervated Insect Muscle, 269

Ram, J. L.: Serotonin Has Both Excitatory and Inhibitory Modulatory Effects of Feeding Muscles in Aplysia, 613

Rattan, K. S.: Age-Dependent Behavioral Changes and Physiological Changes in Identified Neurons in Aplysia californica, 469

Reagan, P. D.: see Schafer, R.

Riopelle, R. J.: Neurite Growth Promoting Factors of Embryonic Chick—Ontogeny, Regional Distribution, and Characteristics, 175

Rospars, J. P.: Deutocerebrum of the Cockroach Blaberus craniifer Burm. Quantitative Study and Automated Identification of the Glomeruli, 221

Russell, J. T.: see Fink, D. J.

Sanderson, A.: see Munoz-Martinez, E. J. Scappaticci, K. A.: Effects of Furosemide on Neural Mechanisms in *Aplysia*, 329

Schaeffer, S. F.: see Livingstone, M. S.

Schafer, R.: Colchicine Reversibly Inhibits Electrical Activity in Arthropod Mechanoreceptors, 155

Schwartz, M.: see Feldman, E. L.

Scott, B. S.: Effect of Chronic Ethanol Exposure on the Electric Membrane Properties of DRG Neurons in Cell Culture, 379

Shukla, U. A.: see Ram, J. L.

Simonneau, M.: see Baux, G.

Sokolove, P. G.: see Minnen, J. Van.

Stromska, D. P.: Patterns of Slow Transport in Sensory Nerves, 441

Strumwasser, F.: see Jennings, K. R.

Sullivan, R. E.: see Miller, M. W.

Takenaka, T.: Axoplasmic Transport of Mi-

crotubule-Associated Proteins in the Rat Sciatic Nerve, 479

Tauc, L.: see Baux, G.

Thompson, C. S.: Interneuronal Control of Postural Motorneurons in the Lobster Abdomen, 87

Thornhill, J. A.: Arginine Vasotocin, an Endogenous Neuropeptide of Aplysia, Suppresses the Gill Withdrawal Reflex and Reduces the Evoked Synaptic Input to Central Gill Motor Neurons, 533

Tudor, J.: see Papka, R.

Van Duivenboden, Y. A.: see Goldschmeding, J. T. Veale, W. L.: see Thornhill, J. A. Viancour, T.: see Glantz, R. M.

Walcott, B.: see Meyer, D. J. Wilkinson, D.: see Matus, A.

Willows, A. O. D.: see Bulloch, A. G. M.

Wilson, J. A.: Unique, Identifiable Local Nonspiking Interneurons in the Locust Mesothoracic Ganglion, 353

Zack, S.: Interommatidial Sensilla of the Praying Mantis: Their Central Neural Projections and Role in Head-Cleaning Behavior, 55



Subject Index to Volume 12

Acetylcholine, 605

N-acetyltransferase (NAT), 167-172

Cyclic adenosine monophosphate (cAMP), 505-512, 587

Adenosinetriphosphate (ATP), 343-351

---, ATPase, 345

Adrenergic blockers, 146-148

Alcohol (ethanol), 379, 435

Axonal transport of proteins and polypeptides,

----, fast, 15-26

---, slow, 254, 441-452, 484, 485

Blowfly, 1

Brain cells, hippocampal, 204

Bufotenine, 582

Butaclamol, 583

Calcium, channels, 82

---, conductance, 82

Campaniform sensilla, 57

Chloride, intracellular, 81

---, -dependent response, 334, 335

Cobalt, staining of identified neurons, 253–366, 272–279, 623

Cockroach, 561-576, 623

Colchicine action on synaptic transmission,

---, on mechanoreceptors, 155-165

Corpus cardiacum, of insects, 143, 149

Cravfish, 312

Cricket, Teleogryllus, 545-558

Denervation, effects of in cricket muscle, 545-

Depolarizing afterpotential (DAP), 515-532

Detergent, inactivation of receptors, 72

----, action on localization of binding, 259-266

Dopaminergic neurons, 216

Electroconvulsive shock (ECS), 216

Enkephalinergic neurons, 210

Excitatory axon, 393, 507

Excitatory postsynaptic potential (EPSP), 89

Excitatory junctional potential (EJP), 545

Explants, of central nervous system, 187

Facilitation, of muscle EJP, 551

Fast axon, to cricket muscle, 549

Flight muscle of insects, 2

——, effects of stage in development, 3 FMRFamide, 599-609

Gamma-aminobutyric acid (GABA), 67, 250-251, 335

----, receptors, 69-72

Ganglion, thoracic, of locust, 269-280, 355-365

—, abdominal (parieto-visceral) of *Aplysia*, 367-457

---, dorsal, root of mouse, 379

----, deutocerebral, of cockroach, 221-247

---, buccal, of Tritonia, 515-532

---, pooled, of Macrocallista, 599-609

——, metathoracic, of cockroach, 627

Glomeruli, identified, of cockroach brain, 221-246

Grooming behavior (of praying mantis), 58–62

Hair sensilla, of cockroach, bristle, 101-120

---. thread, 123-139

Hormone release, 143

Horseradish peroxidase (HRP) as neuron dye,

5-hydroxytryptamine (5HT), 30-52, 508, 580, 590

Identified neuron, R2 of Aplysia, 458-466

----, R15 of Aplysia, 332

----, nonspiking, of locust, 352

----, flexor motorneurons of locust, 270-279

----, motion detector of fly eye, 281-295

---, of slug ganglia, 299

----, cerebral giant of snail, 406-422

---, B5 of Tritonia buccal ganglion, 517

Inhibitory axon, 250-257, 393

Interneurons, of crayfish brain, 311–326

---, giant, of cockroach abdomen, 561-576

---, paired, of cockroach metathoracic ganglion,627

---, multimodal, 325

---, local nonspiking, 353-365

Lobster, Homarus americanus, 27, 87

Locust, 143, 269, 353

Lucifer yellow, 187-191, 314, 320

Microtubules, 75, 164, 478

Muscle, slow, of cockroach, 391

----, flexor, of locust, 270-279

----, extensor tibiae, of cricket, 545-558

- Muscle receptor organ (MRO), of crayfish, 255
- Naloxone, 259-266
- Nerve growth factor (NGF), 175
- Neuroendocrine cells, bag cells, of *Aplysia*, 367–376, 579–589
- Neurosecretory neurons, of slug, 297–301
- Nickel, as intracellular stain, 623-628
- Noradrenaline, 167
- Octopamine, 27-54, 143-151
- Pacemaker mechanism, 425-438
- Pineal gland, 167-172
- Potassium, permeability, 80, 579
- ---, ATPase, 350
- ---, in cerebral cortex, 210-219
- Proctolin, effects on lobster cardiac ganglion, 629-639
- Protein, incorporation, 195
- ---, S 100, 202-209
- ---, in molluscan ganglia, 605

- Reserpine, 145 Rubeanic acid, 625
- Serotonin [see 5-hydroxytryptamine (5HT)]
- Size principle, of motor neurons, 574 Slow axon, of cricket leg, 547
- Slug (garden) Limax, 297
- Snail, Lymnaea, 406-422, 425-439, 589
- Sodium, current, 80
- ---, ATPase, 350
- Spinal cord neuron, 182, 183
- Synapses, 325
- Synaptic plasticity, 557, 558
- Synaptic transmission, 77, 78, 412-414, 428,
- Synaptosomes, 51, 259-266
- Tetraethylammonium (TEA), 515, 579, 583
- Tetrodotoxin (TTX), 375
- Tubulin, 165
- Vanadate, inhibitory effects of, 343-351

